

ENERGY STAR Qualified Gas Condensing Water Heaters Product List

List Posted on October 18, 2011

Qualified gas condensing water heaters are not currently available. If you would like to receive updates when products become available, please contact waterheaters@drintl.com.

[illegible]

Residential Water Heaters Key Product Criteria

ENERGY STAR Residential Water Heaters — Eligible Product Types	
High-Efficiency Gas Storage	A nominal input of 75,000 BTU/hour or less and a rated storage volume from 20 to 100 gallons.
Gas Condensing	
Heat Pump Water Heaters	A maximum current rating of 24 amperes, voltage no greater than 250 volts, and a transfer of thermal energy from one temperature to a higher temperature level for the purpose of heating water. Unit must have "integrated" or "drop-in" configuration.
Whole-Home Gas Tankless	A nominal input of over 50,000 BTU/hour up to 200,000 BTU/hour and a rated storage volume of 2 gallons or less.
Solar Water Heaters	OG-300 rating from the SRCC. Auxiliary tank must be residential-class.

ENERGY STAR Criteria

A water heater model must meet all of the identified criteria to be labeled as ENERGY STAR.

High-Efficiency Gas Storage				
ENERGY STAR Criteria	Energy Factor	First-Hour Rating	Warranty	Safety
Gas Storage (Ending 8/31/2010)	EF \geq 0.62	FHR \geq 67 gallons per hour	Warranty \geq 6 years on sealed system	ANSI Z21.10.1/CSA 4.1
Gas Storage (Beginning 9/1/2010)	EF \geq 0.67	FHR \geq 67 gallons per hour	Warranty \geq 6 years on sealed system	ANSI Z21.10.1/CSA 4.1
Gas Condensing				
ENERGY STAR Criteria	Energy Factor	First-Hour Rating	Warranty	Safety
Gas Condensing	EF \geq 0.8	FHR \geq 67 gallons per hour	Warranty \geq 8 years on sealed system	ANSI Z21.10.1/CSA 4.1

Heat Pump Water Heaters				
ENERGY STAR Criteria	Energy Factor	First-Hour Rating	Warranty	Safety
Heat Pump Water Heaters	EF \geq 2.0	FHR \geq 50 gallons per hour	Warranty \geq 6 years on sealed system	UL 174 & UL 1995
Whole-Home Gas Tankless				
ENERGY STAR Criteria	Energy Factor	Gallons-Per-Minute	Warranty	Safety
Whole-Home Gas Tankless	EF \geq 0.82	GPM \geq 2.5 over a 77°F rise	Warranty \geq 10 years on heat exchanger and 5 years on parts	ANSI Z21.10.3/CSA 4.3
Solar Water Heaters				
ENERGY STAR Criteria	Solar Fraction	Warranty		Safety
Solar Water Heaters	SF \geq 0.5	Warranty \geq 10 years on solar collector, 6 years on storage tank, 2 years on controls and 1 year for piping and parts		OG-300 Certification from the SRCC

Glossary

Energy Factor (EF):

Energy Factor is the ratio of useful energy output from the water heater to the total amount of energy delivered to the water heater. The higher the EF is, the more efficient the water heater.

Solar Fraction (SF):

Solar Fraction is the portion of the total conventional hot water heating load (delivered energy and tank standby losses) provided by solar energy. The higher the SF is, the more efficient the solar water heater.

First-Hour Rating (FHR):

First-Hour Rating is the amount of hot water in gallons a storage water heater can supply per hour (starting with a tank full of hot water).

Gallons per Minute (GPM):

Gallons per Minute is the amount of hot water in gallons a tankless water heater can supply per minute over a 77°F temperature rise.

Temperature Rise:

The difference between the temperature of the hot water exiting the heater and the cold water entering the heater. If you want a shower of 110°F and you live in south Florida with groundwater at 70°F, then that is a 40°F temperature rise (110-70=40).

Definitions for Column Headers- Gas Condensing

Brand and Model

This is how a particular water heater is identified. Manufacturers identify products they produce using the brand and model number. Some products may also be identified with a name or SKU, which is different from the brand or model number. You should always be able to find the brand and model number on a product.

Model numbers sometimes contain wildcard characters, such as *, #, and X, that are placeholders for non-energy attributes, such as color.

Fuel Type

Fuel type refers the kind of fuel the water heater uses to heat the water, either natural gas or propane.

Volume

Volume is the capacity of the tank, in gallons.

Tank Height (inches)

Tank height is the distance from the bottom of the water heater's tank to the top of its tank.

Height to Vent (inches)

Height to vent is the distance from the bottom of the water heater's tank to its vent.

Tank Diameter (inches)

Tank diameter is the width or diameter of the water heater's tank.

Vent Size (inches)

Vent size is the width or diameter of the vent opening.

Input (Thousand BTU per hour)

Input refers to the burner size of the water heater, in thousand BTU per hour.

Energy Factor (EF)

Energy Factor is the ratio of useful energy output from the water heater to the total amount of energy delivered to the water heater. EF is a metric used to compare relative efficiencies of water heaters. The higher the EF is, the more efficient the water heater. EF is determined by the DOE test procedure, Code of Federal Regulations, Title 10, Section 430.

Therms/year (Gas)

Therms/year refers to the amount of natural gas consumed by the water heater according to its Energy Factor determined by the DOE test procedure, Code of Federal Regulations, Title 10, Section 430.

Gallons/year (Propane)

Gallons/year refers to the amount of propane consumed by the water heater according to its Energy Factor determined by the DOE test procedure, Code of Federal Regulations, Title 10, Section 430.

First Hour Rating (gallons per hour)

First-Hour Rating is the amount of hot water (in gallons) a storage water heater can supply per hour (starting with a tank full of hot water).

Recovery Efficiency

Recovery efficiency refers to how efficiently the heat from the burner is transferred to the water in the tank.

Min Warranty – Heat Exchanger (years) and Min Warranty - Parts (years)

Warranty is an assurance by the manufacturing partner that the purchased equipment (heat exchanger) and components (parts) are warranted for a certain required period-of-time, depending on the technology. Minimum warranty is the shortest warranty you can receive on the qualified water heater model.

Active

Models can be discontinued by manufacturers, but may still be available in stores. Discontinued models will appear on this list for a year after their last production date to allow retailers to clear inventory. These models are still ENERGY STAR qualified, but they are no longer manufactured. Sponsors, such as utilities, may honor incentives for discontinued models at their discretion.

